YACHTSMEN ENJOY FITTING OUT TIME

Find as Much Pleasure in Working on Craft as in Racing Them.

EVERY YARD IS BUSY

These are busy times in all yards and basins where yachts have been stored since the close of the last season. In such yards at the Gas Engine and Power Company's and the New York Yacht Launch and Engine Company's on the Harlem River, Jacob's and Nevins's at City Island and some of the smaller shops where new vessels are nearing completion every effort is being made to finish the work so that the yachts may be launched next month, but at some of these yards there have been labor troubles, and some owners will be disappointed. In addition to the new work yachts that have been stored have to be overhauled and refitted, and there is lots of work for all those who want to work.

At the storage basins such as Tebo's, Beard's, the Marine Basin, Fletcher's at Hoboken, and at Port Washington, Greenwich, Port Jefferson, New London, and in short every yacht yard on the coast from the Delaware to Maine, there never was so much work as is being done now. Every moment of fine weather is being taken advantage of and hulls are being scraped and painted, joiner work and spars are being varnished and the engineers and their staffs are overhauling and repairing the engines.

At the basins mentioned chiefly large yachts are stored or vessels whose owners can afford to pay to have the overhauling done and not be troubled until the skipper announces that the vessel is ready, but all along the water front of the greater city, on both sides of the Hudson River, on both sides of Long Island Sound and wherever there is water there are thousands of small craft whose owners are as busy as bees each week end getting their boats in shape for the yachting season. The owners of these boats enjoy the work of fitting out just as much as they do the racing and cruising later and the work that they do in preparation makes them appreciate more the ease and comfort of sailing or motoring.

These small craft have stood through the bleak storms of the winter with their spars stripped bare and ugly canvas covering their hulls. The spars have grown black under the influence of the weather and the canvas has accumulated all the dirt and dust that has blown about the shores, and this has been indelibly imbedded in it by the rains and snows. On the first sign of warm weather the canvas coverings have been stripped off and the hulls have been carefully examined to find out just what is to be done to fit out. The spars have been scraped and now these are beginning to glisten under new varnish, and the hulls to look resplendent under new coats of white paint. As the days grow longer work will be continued in the evenings and by the middle of next month launchings will be in order. Then instead of everything looking bare around the yacht clubs there will be fleets of white hulled vessels tugging at their moorings ready for service at any time.

Among the yachts at Fletcher's yard at Hoboken now fitting out are Vice-Commodore J. P. Morgan's steam yachts Corsair and Mermaid, Roswell Eldridge's Kehtoh, Wilson Marshall's Watawga and Allison V. Armour's auxiliary Utowana.

YACHTING KNOTS AND SPLICES.

The cruiser shown by the Luders Company at the recent Motor Boat show has been sold to A. J. Moxham. It is 60 feet long and fitted with a Dusenberg engine of 150 horse power. The yacht is to be used on Chesapeake Bay.

The 31 rater building for George Lee from designs by Owen will be ready for delivery early next month. The hull is planked and the interior fittings are being put in by the builders, Hodgdon Bros., at East Boothbay, Me.

It is reported that Herbert L. Bowen of the Corinthian Y. C. of Marblehead has purchased the 31 rater Michicago which has raced on the lakes. This will be the ninth yacht in this class in Eastern waters.

Sidney A. Begg is having a 25 rater built from Owen designs, which is to be named Ruweida.

The first of the new 40 footers to be finished by Herreshoff will be the Squaw for Harold S. Wesson of Springfield. This yacht is almost ready for a trial.

The schooner building for J. Fred Brown at Herreshoff's will be ready for launching in about a week. It is to be named Mariette.

Commodore Erwin A. Clark of the Portland Power Boat Association announces that the annual cruise this year will be held July 12 to 15 inclusive. The fleet will visit Boston harbor.

Lawley is building thirteen yachts of 85 feet water line length and over. Twelve are of wood and one of steel. There are three auxiliary yawls, one schooner and the others are power yachts.

R. B. Budd has sold the class P sloop Amoret to Alfred I. du Pont, who will have the yacht taken to Chesapeake Bay for racing there.

The class R Q sloop Grayjacket, raced successfully on Gravesend Bay by Floyd C. Noble and then sold to E. N. Smith of Buffalo, has been sold to C. N. Kendrick of Buffalo and will be raced on Lake Erie.

Harry H. Raymond has sold the 41 foot water line sloop Hermes to William G. Ravol through the office of Gielow & Orr.

The auxiliary schooner Simitar has been sold by John G. Alden and Cox & Stevens to John Mitchell for use at Manchester. The Simitar is 46 feet on the water line and was built by Lawley in 1899.

The 45 foot motor yacht Kingfisher has been chartered for the season to Earl N. Potter of Jamestown through Gielow & Orr.

The house boat Awa, owned by A. de Witt Cochran, has been chartered through Gielow & Orr to William Thaw 3d, who is using the yacht in Florida waters. The Awa is 95 feet long and was built by the Mathis company in 1912.

Roll Best Bowler in Montclair.

MONTCLAIR, N. J., April 22.—John K. Roll has won the bowling championship of the Montclair A. C., finishing the season with an average of 193 for ninety-three games. Roll's name will be inscribed on the bronze tablet that contains the names of previous champions of the club, and which occupies a place in the clubhouse on Valley road.

TEACHING THE OWNER TO KNOW HIS AUTOMOBILE

Being the Eighth of a Series of Practical Articles by an Expert on the Subject of the Car and Its Operation.

By WILLIAM H. STEWART, JR., Pres. Stewart Automobile School.

A very few years ago the automobile owner did not conceive of having his motor cranked and his lamps lighted by electricity. When the first electric self-starting and lighting system appeared many were very sceptical as to its practical efficiency. At first annoying troubles were experienced, but gradually these were eliminated by efficient engineers, who devoted much time to working out a practical starting and lighting device.

For a time there was much discussion as to the merit of self-starters. Some manufacturers even refused to apply these devices to their cars, believing that the additional complications incident thereto would cause a loss of sales. However, the opposite happened. The great value and convenience of electric starting and lighting was quickly appreciated by the automobile purchaser and within a very short time he demanded it. Then it was that most every manufacturer overtaxed his engineering department with plans and problems in working out and building various devices to meet the public demand. In some cases the results were satisfactory and in others disastrous. In fact it might be stated that at one time the efficient starting and lighting system placed certain cars in the lead, which handicap has been very hard to overcome. On the other hand, some good cars were condemned and set back by employing crude methods of starting.

Undoubtedly the best engineering talent, both electrical and mechanical, has devoted much time during the past few years to perfecting various systems. Much capital has been employed and much wasted. Like any invention, mechanical or otherwise, it may work out well on paper, but prove inefficient in practice. The automobile is subjected to so much abuse in the hands of incompetent operators that to produce a simple method of electric starting has been a severe tax upon the engineering force of nearly all manufacturers. To-day there is hardly a car without a full electric starting and lighting system. In fact no one would think of investing more than $500 for an automobile without it.

The subject of electric starters is extensive and cannot be discussed here in detail. It may be said that there are many very good methods employed at present on different makes of cars. One may prove more suitable for a particular make of car than another. Then again the engineering departments of factories may differ as to the merits of various systems and accordingly employ the kind they approve.

It is safe to state that with the present advanced development of the various systems the purchaser of an automobile need not permit this factor to necessarily influence his purchase. It is not the purpose of this article to discriminate against or elaborate upon any particular system or any particular method of starting and lighting, but rather to give a simple explanation of how a modern system is employed.

In the above chart are two views of a power plant, one showing the right hand side with electric starting motor attached as shown at "D" and the other the left hand side with electric generator attached as shown at "F." This particular method employs two units. In the complete starting and lighting system there are other important factors, such as the storage battery, regulator, ammeter, starting switch, fuse box, starting motor drive, &c.

At "E" is shown a three cell six volt eighty ampere hour storage battery. When the starting switch is pressed down by a pedal or some other device the electric circuit is closed between the battery and the six volt starting motor located at "D" on the flywheel case. The current from the battery causes the starting motor armature shaft to rotate very rapidly. At "A," "B" and "C" are shown views of this armature shaft with gear "B," which meshes with the gear on the rim of flywheel. On the extension of the armature shaft is a hollow sleeve "A," having a coarse screw thread cut on the outside. Gear "B" is screwed onto the sleeve and is free to move forward and backward when the sleeve is turned. The armature shaft drives the sleeve through a heavy coil spring "C" so the sudden starting of the armature shaft causes the gear to move backward along the threads until it meshes with teeth cut in the rim of the engine flywheel.

When the gear is fully meshed it comes up against a stop and then turns with the sleeve, thus allowing the starting motor to turn the flywheel, which cranks the engine. It may be noted that the coil spring furnishes a very flexible drive which prevents the load being thrown on the starting motor too suddenly when the gear comes up against the stop and starts to rotate with the sleeve. As soon as the motor is started the flywheel then begins driving the gear "B" much faster than the starting motor could possibly drive it. This causes the gear to unscrew and move forward out of mesh with the teeth on the flywheel, permitting the engine to run free. As soon as the foot is taken from the switch, which should be immediately after the engine takes up its cycle, the starting motor comes to rest.

Only two wires are used in this system, one from the starting switch to the battery and the other from switch to the starting motor. The circuit is completed by grounding the starting motor and the battery.

The starting motor needs very little attention except to keep the collector brushes and commutator clean; also the bearings lubricated occasionally. If the commutator becomes corroded or the brushes badly worn poor results will be obtained. Usually this instrument is so arranged that mud or dirt will not penetrate the vital parts. Proper lubrication is very essential and an occasional inspection should be made for this; likewise for loose terminals, which may be loosened by vibration.

The electric current for the lamps, horn, starting motor and ignition is drawn from the storage battery, which is kept charged by a simple six volt generator such as shown at "F."

The igniter and distributer is shown at "G." Generator "F" is driven by an extension of the fan pulley shaft through a flexible coupling. The duty of this is to generate current for storage battery and maintain it at the maximum point of efficiency at all times. If it were not for the generator the storage battery supply would soon be exhausted due to the amount of current constantly consumed by using the ignition system, the starting motor and the lights.

The generator is so designed that when the engine is running an ample supply of current is generated for the purpose needed, without drawing from the battery. However, since the motor is subjected to great speed variation some regulating device is necessary to control the current output. For this purpose a regulator is attached, which automatically cuts in or cuts out the circuit as needed. This is a simple device, which when once adjusted, seldom needs attention and is usually located behind the dash. Likewise, a current indicator is also provided, which serves to silently inform the operator as to how much, if any, current is being generated while the motor is running, or consumed when motor is idle. This instrument is usually located on the dash in plain view of the operator.

Then again the fuse box and lighting switch constitutes another important factor. Switches, of course, control the current to the various lights similar to any ordinary electric lighting switch. At the fuse box will be found several fuses controlling the various electric circuits, such as for the headlights, the side lights, the rear light, the horn, &c. These are installed as a means of safety in the various lines to prevent injury to the battery or instruments should short circuits occur. With a fuse installed a short circuit may take place, but the overload will cause the fuse to "blow out," thereby opening the circuit automatically.

Too much emphasis cannot be placed upon the proper care of the storage battery. The efficiency of the electrical system depends upon it. The cells of the battery must be kept filled, or rather the plates of each cell must be kept covered at all times with electrolyte. Likewise the battery should be maintained in a fully charged condition at all times.

Many operators use the car more at night than during the day. In ordinary driving the current output of the generating system is sufficient to supply the current needed for ignition and lights, but the current output over and above this is not sufficient to charge the battery. While the car is standing and the lights burning the battery is being exhausted. It may be observed then that in such an instance much more current is being taken from the battery than replaced. The natural result in a short time there must be a discharged condition of the battery. The first evidence of this is failure of the self-starter to work and difficulty in starting the engine due to weak battery current for ignition. In such an instance the battery should be removed and fully charged from an outside source. Where conditions of driving do not insure proper charging by the generator as above outlined care should be taken to remove the battery periodically for charging or else permit the motor to run at a reasonable rate of speed at stated intervals.

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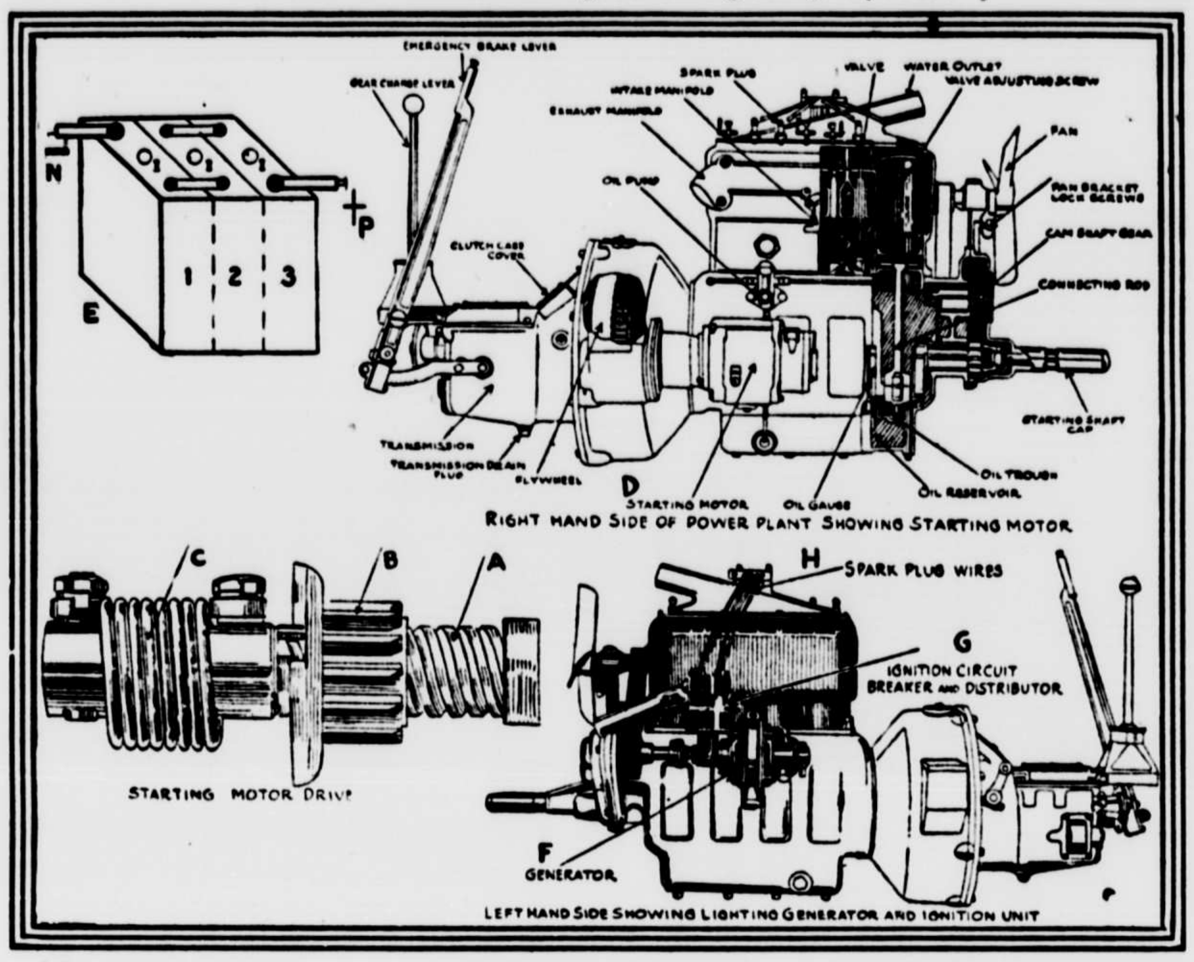
Units of the Starting and Lighting System



A-B-C—Starting motor drive.
D—Starting motor.
E—Storage battery.
F—Generator.
G—Ignition circuit breaker and distributer.
H—Spark plug wires.
I—Vent and filler caps.
N—Negative terminal of battery.
P—Positive terminal of battery.

Buttonless Upholstery.

Westcott motor cars are upholstered without the use of buttons. The leather is pleated and installed by a method which belongs to the Westcott trimming department. This plan, according to Leu H. Allen, president of the Allen Westcott Motor Car Company, local Westcott dealers, the upholstering is of No. 1 long grain, full, bright enamel leather, backed by long curled hair. Beneath this in the seat cushions are double mattress springs of unusual depth. Comfort and elegance, Mr. Allen asserts, are outstanding features of the Westcott cars.

HARKNESS MAY TRY FOR RECORD

Wants to Drive Blitzen Benz at Speedway and Surpass Burman's Work.

With the opening of the automobile racing season only a few weeks off, racegoers are wondering who will pilot the famous Blitzen Benz car, in which the late "Wild Bob" Burman established the world's record in 1911 at Daytona, Fla., when he drove the old "war horse" a mile in 0.25.40. This performance has never been equalled. It is doubtful if there is a car in the country which might be considered a dangerous contender to the Burman mount of five years ago.

Barney Oldfield was the first driver to bring the car into prominence, capturing a world's record with it by negotiating a mile in 0.27.28 in 1909 over the Daytona course.

In Burman's entire career as a race driver he never feared for his Benz record except during the season of 1912, when a 300 horse-power Mercedes and a Fiat of the same power were built to lower the Burman mark. The Mercedes failed to accomplish its purpose when it started at Semmering Hill, Germany, and the big Fiat fell short in a trial at the mile record at Saltburn-by-the-Sea, England.

The Blitzen Benz is now included in the stable of Harry S. Harkness, a wealthy race driver, who has moved his string of Peugots, Delages and Sunbeams to the Sheepshead Bay Speedway, where they are entered for the Metropolitan Trophy contest, scheduled for May 13. Carl Limberg will manage the team of Delages, and Franchi will lead the Peugeots; but who will attempt to lower the Burman record in the Blitzen Benz is not known. Rumors, however, are current in racing circles that Harkness himself will attempt to lower the mile mark with the famous Benz.

UP-TO-THE-MINUTE MITCHELL.

This Fine Car Has All the Latest Features.

After a very successful season with "the Six of '16" and the Mitchell Eight, John W. Bate, chief engineer, is out with the announcement of a new Mitchell model, light weight six cylinder car, to sell for $1,325, without any mechanical change except as to small details in the engine. The Mitchell-Lewis Motor Company is now putting out a car which is a last minute model both as to the lines of the body and equipment. The same body will also be offered on the Eight chassis, which is still priced at $1,450.

Ignoring the completeness of conveniences as incorporated in the first series of "the Six of '16," Mr. Bate has evidently noted well the improvements that the higher priced cars have been setting forth as sales arguments. In the new model are twenty-six features unique to the Mitchell, all paid for through factory savings due to the efficient production methods employed by the chief engineer.

While both "the Six of '16" and the Mitchell Eight have gained a remarkable reputation as cars with wonderful riding qualities, the steps taken by Engineer John W. Bate, the designer of the Mitchell, to further improve this feature in the new model are in the direction that can be looked forward to as a trend in the design of automobile construction.

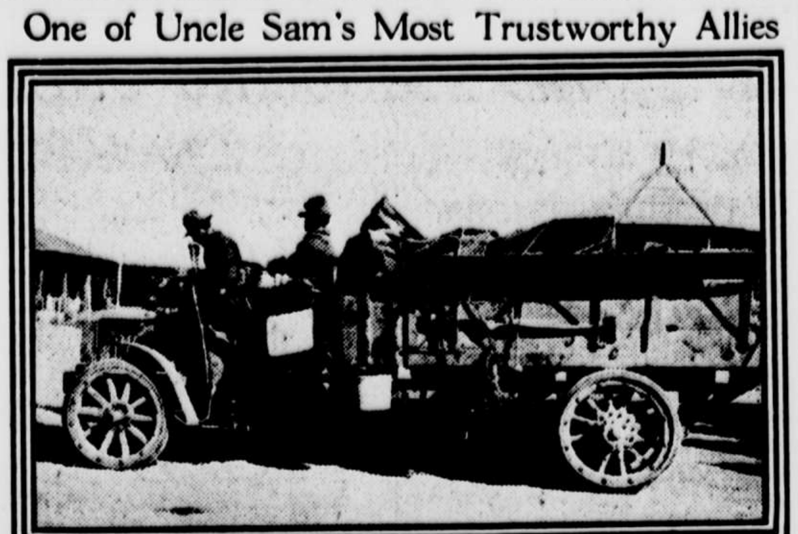
The Mitchell is handled here by the Carl H. Page Company at "A Place in the Sun" on Columbus Circle.

"YOU NEVER CAN TELL."

If One Has the Money He Just Buys.

Last week E. M. Dalley, metropolitan distributer of Paige-Detroit cars, attended the Grand Central Palace Flower Show in order to purchase some new plants, and William Courtenay, the actor, visited the show for the same purpose. When the latter encountered Mr. Dalley and one of the latter's salesmen the conversation switched from flowers to automobiles, and instead of buying orchids and American Beauty roses Mr. Courtenay placed his order for a Paige-Detroit Fairfield "Six" touring car.

One of Uncle Sam's Most Trustworthy Allies



Packard truck at Columbus, New Mexico, loaded, fully equipped and ready to leave for the interior of Mexico. Note the rifle in scabbard just in front of the driver's control board. The Packards have been named by General Pershing as his "Flying Squadron."

"The automobiles have done work which astonished me," says the General. "They have traversed roads which seemed impassable; they have climbed hills where the rocks alone appeared sharp enough to cut the tires and smash the running gear; they have gone through canyons where a goat might hesitate. The automobiles have made faster progress than any branch of the service except our aeroplanes. The automobile trucks have brought food for men and horses not only to advance bases, but to points beyond these bases, sufficiently close to the cavalry columns to enable them to send back for supplies without losing the advantages of their early forced marches.

"Automobiles, likewise, have been of great value to the staff officers. They have covered trails where nothing except a horse or man ever before travelled at the rate of a hundred miles a day. There were surprisingly few accidents to cars. When the wireless would not work, due to static conditions, and when hurricanes kept the aeroplanes lashed to the ground, the automobiles have bridged the gap.

"When making long rides through districts where attack might be expected the automobiles travel in small groups with guards in each. With their mobility these auto parties are considered here as very effective fighting groups in emergencies."

Back Into the Fold

JOHN F. PLUMMER.

After sixteen years as local manager of the Locomobile Company of America, John F. Plummer, recently resigned, has organized Colonial Motors, Inc., which will exclusively handle in this territory the new Liberty car manufactured by Percy Owen in Detroit.

Colonial Motors, Inc., will open their showroom about the first of June at Fifty-sixth street and Broadway. With President Plummer will be associated Arnold Wood, as vice president, and among his stockholders are a number of prominent New York business men, many of whom have been for years among Mr. Plummer's numerous customers.

Mr. Plummer's decision to handle the Liberty car in New York reveals an interesting agreement between his motoring judgment and that of Mr. Owen. Mr. Plummer represents the longest successful selling experience in New York and Mr. Owen, also well known here, represents a combination of long selling experience and manufacturing training. It is interesting to note that both of these men recognize that there is now more than ever a large demand for the small, strictly high grade motor car at a reasonable price. The Liberty car has been built to fill exactly this demand, and will sell in the $1,000 class.

Mr. Plummer invaded the South Seas with the first motor driven vehicle which had ever been seen in that corner of the world, when, in 1901, he took with him a number of steam Locomobiles, established agencies throughout New Zealand, Australia, China, Japan and the Philippines. Those were the days when of twenty-seven "horseless carriages" starting out from the Waldorf for the eventful trip to Ardsley-on-the-Hudson, only eight of them arrived, and these with more difficulty than is now experienced in a transcontinental tour.

HOW TO SAVE GASOLENE.

Herbert Chase Tells the Motorist What to Do.

In an interesting article on the fuel situation in the *Club Journal*, Herbert Chase, chief engineer of the A. C. A., points out a few ways in which the motorist can save much gasolene. He says:

"While discussing the subject of fuel consumption it is well to consider a fact well recognized by all automobile engineers that the fuel consumption of the average car is fully 25 per cent. higher than it need be if the operator would see that the carbureter is set and kept in proper adjustment. If all car owners would give this fact the consideration it deserves not only would their own bills be lower but the average consumption of cars in general would be so much decreased that the smaller demand should operate to decrease the retail price.

"Another prolific source of waste in fuel is that which results from undue friction in the mechanism of the car, notably at the brakes. In nine cars out of ten the brakes drag to a considerable extent, while those of the other 10 per cent. are seldom in such perfect adjustment that they do not drag at any point. The resultant friction not only increases the fuel consumption by making necessary the development of more power in the motor but also means more rapid wearing out of the brake lining and brake drums.

"Care should be taken to see that the compression of the motor is not allowed to fall off, due to an accumulation of carbon on the valves or to worn or loose-fitting pistons. By observing these simple precautions the fuel consumption of the average car can be decreased from 10 per cent. to 30 per cent. or even more."

LONG TOURS ENJOYABLE.

National Owner Plans for 1,000 Miles; Goes 10,000.

"Long tours averaging from 1,000 to 5,000 miles are becoming popular with motorists and 1916 will see considerable long distance touring," says William C. Poertner, president of the Poertner Motor Car Company, Inc., metropolitan distributer of National and Jeffery cars. "This condition is due to the fact that the present day motor car has reached that high state of efficiency which insures confidence of owners that automobiles can go anywhere and back without fear of breakdown.

"Only a dozen years ago a trip of any length required several days of preparation and a long trip was considered quite an adventure. At that time motorists garbed themselves in hideous costumes and goggles, or rather masks, and the equipment was cumbersome and consisted of shovels, ropes and enough tools to equip a small machine shop.

"To-day long tours, and even little ones, are looked upon with pleasure rather than with an idea of work ahead. Hardly any preparations are made in advance. One of our customers started out recently in a National for a 1,000 mile trip through New York State, but the spirit of motoring has taken such a firm grip of him that before he returns he undoubtedly will have covered 10,000 miles, judging from a letter received from him a few days ago. While the roads are not in the best of condition just now, he claims that there is 'romance in wallowing in mud with a machine that balks at nothing.' Another of our customers is planning a transcontinental trip to be made the latter part of next month."